

Safety Recommendation A-67-3

The National Transportation Safety Board (NTSB) issued Safety Recommendation A-67-3 to the Federal Aviation Administration on January 12, 1967, as a result of the NTSB's investigation of the November 29, 1966 aborted take-off and almost complete electrical failure of Allegheny Airlines flight 305, a Convair 340, N3414 in Harrisburg, Pennsylvania. This investigation disclosed several conditions that we consider hazardous to flight. A nearly total failure of the aircraft electrical system occurred during the takeoff run. The takeoff was aborted and wheel braking applied. The engine throttles were placed in the reverse thrust position, but because of the electrical failure the propellers did not move to a negative pitch which resulted in the reapplication of forward thrust. The aircraft ran off the end of the runway and struck an approach light stanchion which tore away a section of the left wing. The aircraft came to rest near the bottom of a hill beyond the end of runway 26, the nose wheel collapsed and the outboard fuel tank in the left wing was slightly damaged but retained its fuel. The text of Safety Recommendation A-67-3 is as follows:

To the Federal Aviation Administration: It is recommended that all users of Convair 340, 440 and 580 models be alerted to this variation in electrical cockpit heaters, that the terminals be prominently identified and manual instructions cite the different terminal configurations with appropriate installation instructions. It is recommended that the Convair 340, 440 and 580 aircraft heater circuits be modified to provide circuit protection that will open under the most adverse fault condition before the feeder limiter opens. During the investigation, two maintenance items were noted which we believe are worthy of your attention. While examining the aircraft, loose nuts, screws, drill shavings and trash were found inside of the circuit breaker panel compartment. Also, it was revealed that no functional tests were performed on the heater after its installation before releasing the aircraft for passenger service.

Additional information about the subject accident is below.

NTSB Identification: NYC67A0089

14 CFR Part 121 Scheduled operation of U.S. AIR
Aircraft: CONVAIR 340, registration: N3414

FILE LIGHT	DATE	LOCATION PILOT DATA	AIRCRAFT DATA	INJURIES F S M/N	F
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URPOSE

1-0047	66/11/29	NEW CUMBERLAND PA	CONVAIR 340	CR-
0 0 4	SCHED DOM PASSG SRV		AIRLINE TRANSPORT, AGE	
	TIME - 1728		N3414	PX-
0 0 12			42, 17718 TOTAL HOURS,	
			DAMAGE-SUBSTANTIAL OT-	
0 0 0			2500 IN TYPE, INSTRUMENT	

RATED.

NAME OF AIRPORT - HARRISBURG-YORK

OPERATOR - U.S. AIR

TYPE OF ACCIDENT

PHASE OF OPE

RATION

MISCELLANEOUS

TAKEOFF:

RUN

COLLIDED WITH: RUNWAY OR APPROACH LIGHTS

TAKEOFF:

ABORTED

PROBABLE CAUSE(S)

MISCELLANEOUS ACTS, CONDITIONS - ELECTRICAL FAILURE

PERSONNEL -

MAINTENANCE, SERVICING, INSPECTION: IMPROPER MAINTENANCE (MAINTENANCE PERSONNEL)

PERSONNEL -

MAINTENANCE, SERVICING, INSPECTION: INADEQUATE INSPECTION OF AIRCRAFT (MAINTENANCE PERSONNEL)

PILOT IN COMMAND - SPONTANEOUS-IMPROPER ACTION

PILOT IN COMMAND -

IMPROPER OPERATION OF POWERPLANT & POWERPLANT CONTROLS

MISCELLANEOUS ACTS, CONDITIONS - IMPROPER EMERGENCY PROCEDURES

FACTOR(S)

MISCELLANEOUS ACTS, CONDITIONS - THRUST-UNABLE TO REVERSE

REMARKS-

COMPLETE ELEC. FAILURE DUE IMPROPERLY INSTALLED HTR. PLT TRIED REV PROP. ACFT W
G STRUCK APP LITE TWR.